

SYSTEM AND METHOD FOR PROVIDING ACCESS TO A BUS

ABSTRACT OF THE DISCLOSURE

5 A computer system (10) includes a bus controller (12),  
a bus (14), a plurality of processing devices (16) and a  
plurality of enabling switches (18). Each enabling switch  
5 (18) corresponds to a separate one of the processing  
devices (16). Each processing device (16) sends an access  
request (24) to arbitration logic (22) in the bus  
controller (12), requesting access to the bus (14). The  
arbitration logic (22) selects one of the access requests  
10 (24) according to a priority protocol. The arbitration  
logic (22) generates a control signal (20) associated with  
the selected access request (24). The control signal (20)  
is provided to the enabling switch (18) corresponding to  
the processing device (16) that sent the selected access  
15 request (24). The enabling switch (18) enables access to  
the bus (14) for the processing device (16) in response to  
the control signal (20). In this manner, the computer  
system (10) can limit a number of processing devices (16)  
having access to the bus (14) in order to control a load on  
20 the bus (14).